

## TENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6750-0005.60	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 03/38158	International filing date (day/month/year) 25/11/2003	(Earliest) Priority Date (day/month/year) 27/11/2002
Applicant  IMAGING THERAPEUTICS, INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ Certain claims were found unsearchable (See Box I).

3. ☒ Unity of invention is lacking (see Box II).

4. With regard to the title,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

PATIENT SELECTABLE TOTAL AND PARTIAL JOINT ARTHROPLASTY DEVICES AND SURGICAL TOOLS

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

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☐ None of the figures.

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06T7/00 G06T17/00 A61F2/46 A61B17/17

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F G06T A61B A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, BIOSIS, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/22014 A (ANDRIACCHI THOMAS P ; UNIV LELAND STANFORD JUNIOR (US); STEINES DAVID) 21 March 2002 (2002-03-21) cited in the application page 41 - page 42 -----	1-4
X	PHIDIAS NEWSLETTER NO 6 - RAPID PROTOTYPING IN MEDECINE, [Online] June 2001 (2001-06), pages 1-8, XP002304725 EDITOR N MOOS DANISH, TECHNOLOGICAL INSTITUTE TEKNOLOGIPARKEN, AARHUS, DK Retrieved from the Internet: URL: <a href="http://www.materialise.com/medical/files/ph6.pdf">http://www.materialise.com/medical/files/ph6.pdf</a> [retrieved on 2004-11-08] pages 3, 6-7 (article "Modeling and design [...] " by Taha et al.) ----- -/--	1-4



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

9 November 2004

Date of mailing of the international search report

23.02.2005

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

International Application No

PC./US 03/38158

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KIDDER J ET AL: "3D model acquisition, design, planning and manufacturing of orthopaedic devices: a framework" PROCEEDINGS OF THE SPIE - ADVANCED SENSOR AND CONTROL-SYSTEM INTERFACE, BOSTON, MA, USA, vol. 2911, 21 November 1996 (1996-11-21), pages 9-22, XP008038390 ISSN: 0277-786X section 4.2	1-4
X	----- CARR J C ET AL: "SURFACE INTERPOLATION WITH RADIAL BASIS FUNCTIONS FOR MEDICAL IMAGING" IEEE TRANSACTIONS ON MEDICAL IMAGING, IEEE INC. NEW YORK, US, vol. 16, no. 1, 1 February 1997 (1997-02-01), pages 96-107, XP000685494 ISSN: 0278-0062 abstract	1-4
X	----- US 2002/059049 A1 (BRADBURY THOMAS J ET AL) 16 May 2002 (2002-05-16) paragraph [0057] paragraph [0060] - paragraph [0062] paragraph [0115] -----	1-4

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 03/38158

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 39, 84-85  
because they relate to subject matter not required to be searched by this Authority, namely:  
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-4

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-4

in the context of designing an articular implant,  
reconstructing in an image the dimensions of diseased  
cartilage to correspond to normal cartilage, with a  
parametric surface  
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2. claims: 5-7

in the context of designing an articular implant,  
reconstructing in an image the dimensions of diseased  
cartilage to correspond to normal cartilage, via a  
morphological closing operation  
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3. claims: 8-17, 27-38

evaluating the image-fit of an articular repair system into  
a joint  
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4. claims: 18-26, 65-83, 86-102

surgical tool for preparing a joint to receive an implant,  
the tool comprising one or more surfaces or members that  
conform to the shape of the articular surfaces of the joint.  
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5. claims: 40-64

customizable implant configured for placement between joint  
surfaces  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/38158

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0222014	A	21-03-2002	AU 9088801 A	26-03-2002
			CA 2425120 A1	21-03-2002
			EP 1322225 A1	02-07-2003
			WO 0222014 A1	21-03-2002
			US 2004167390 A1	26-08-2004
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US 2002059049	A1	16-05-2002	US 2002007294 A1	17-01-2002
			US 2004243481 A1	02-12-2004
			AU 4993501 A	23-10-2001
			EP 1312025 A2	21-05-2003
			WO 0177988 A2	18-10-2001
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